

As a scientist working in agriculture, I have serious concerns that current GPS capabilities will be seriously affected by the LightSquared proposal and the serious impact this will have on current farmer field operations and research activities. Currently, Global Positioning Systems are used by farmers to aid with tractor and equipment guidance, which is critical for optimal use of land, fertilizer and pesticide applications, seed placement and soil compaction control. Operation of low flying airplanes used for agricultural spraying applications would also be negatively affected. The ability to have sub-meter accuracy is critical, but also been able to return to the same geo-location on a field year-after-year is crucial. Further, current GPS technologies are frequently used in agricultural research by a large number of federal, university and private scientists. The nature of a large number of research projects, which typically span several years to capture differences in weather patterns, requires accurate geo-location and elevation information. Upgrading GPS and guidance equipment due to signal degradation from LightSquared proposal will place an unnecessary financial burden on farmers and the science community. Upgrading might not be a viable option for some given the high cost of the equipment, especially for scientists that rely on grants to fund their programs. This can have a significant negative impact on the economy, environment and food security.